

Notice of Allowability

Application No.

10/069,353

Examiner

Chih-Min Kam

Applicant(s)

EBERZ ET AL.

Art Unit

1656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/19/07.
2. ☒ The allowed claim(s) is/are 73-86 and 88-90.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Art Unit: 1656

DETAILED ACTION

1. The Request for Continued Examination (RCE) filed on April 19, 2007 under 37 CFR 1.114 is acknowledged. An action on the RCE follows.

Status of the Claims

2. Claims 73-86 and 88-90 are pending.

Applicants' amendments filed April 19, 2007 is acknowledged. Applicants' response has been fully considered. Claim 73 has been amended. Therefore, claims 73-86 and 88-90 are examined.

Withdrawn Claim Objections

3. The previous objection to claim 1 is withdrawn in view of applicants' amendment to the claim, and applicants' response at page 5 in the amendment filed April 19, 2007 and Examiner's amendment (see below).

Withdrawn Claim Rejections - 35 USC § 112

4. The previous rejection of claims 73-86 and 88-89, under 35 U.S.C. 112, first paragraph, written description, is withdrawn in view of applicants' amendment to the claim, and applicants' response at page 5 in the amendment filed April 19, 2007 and Examiner's amendment (see below).

Examiner's Amendment

An **Examiner's Amendment** to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Raymond Harmuth on June 29, 2007.

Art Unit: 1656

Examiner's Amendment to the Specification:

Please insert the following paragraph after the title at page 1 of the specification:

This application is a 371 of PCT/EP00/08013 filed August 17, 2000.

Examiner's Amendments to the Claims:

Claims 73 and 84 have been amended as follows:

Claim 73 (Currently amended) A vector for heterologous expression of a gene cluster for spinosyn biosynthesis, comprising a DNA fragment larger than 40 kb wherein the DNA fragment comprises a nucleic acid comprising ~~at least a part~~ a nucleotide sequence selected from the group consisting of

- (a) SEQ ID NO: 1, and
- (b) a sequence which, due to the degeneracy of the genetic code, codes for the same amino acid sequences as a the sequence defined in (a).

Claim 84 (Currently amended) The host cell of Claim 83, wherein the host cell ~~comprises~~ is a prokaryotic or eukaryotic cell.

The following is an **Examiner's Statement of Reasons for Allowance**: The following reference appears to be the closest art to the claimed invention. Baltz *et al.* (U.S. Patent 6,143,526) teach an isolated DNA molecule comprising a DNA sequence (i.e., spinosyn biosynthetic gene) having 80,161 base pairs that encodes spinosyn biosynthetic enzymes, where the cloned genes are designated as spnA, spnB,.....spnS; a recombinant DNA vector comprising the DNA sequence; and a host cell transformed with the recombinant vector. However, the reference does not teach or suggest a vector for heterologous expression of a gene cluster for spinosyn biosynthesis, comprising a DNA fragment comprising a nucleotide sequence selected from the group consisting of SEQ ID NO:1 (50,000 base pairs) and a sequence which, due to the degeneracy of the genetic code, codes for the same amino acid sequences as SEQ ID NO:1. Therefore, the claims are allowable over the art of record.

Art Unit: 1656

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (571) 272-0948. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Bragdon can be reached at 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chih-Min Kam, Ph. D.
Primary Patent Examiner



CHIH-MIN KAM
PRIMARY EXAMINER

CMK

June 29, 2007